

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO	. I	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/686,446	10/686,446 10/15/2003		Gunner D. Danneels	P17634	6854	
25694	7590	08/01/2006		EXAM	EXAMINER	
INTEL CO	ORPORA	TION	KIM, WESLEY LEO			
P.O. BOX 5326						
SANTA C	LARA, CA	A 95056-5326		ART UNIT	PAPER NUMBER	
				2617		
				DATE MAILED: 08/01/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/686,446	DANNEELS, GUNNER D.				
Office Action Summary	Examiner	Art Unit				
	Wesley L. Kim	2617				
The MAILING DATE of this communication app Period for Reply		correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be to will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONI	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
 1) ☐ Responsive to communication(s) filed on 27 Fe 2a) ☐ This action is FINAL. 2b) ☐ This 3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E 	action is non-final. nce except for formal matters, pr					
Disposition of Claims						
4) ☐ Claim(s) 1-13 and 23-27 is/are pending in the a 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-13 and 23-27 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 10/15/03 is/are: a) ☐ a Applicant may not request that any objection to the	vn from consideration. r election requirement. r. ccepted or b)□ objected to by t					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a	a)-(d) or (f).				
 a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list 	s have been received in Applica rity documents have been receiv I (PCT Rule 17.2(a)).	ved in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 4/27/05.	4) Interview Summar Paper No(s)/Mail D 5) Notice of Informal 6) Other:					

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/27/06 has been entered.

Response to Amendment

This Office Action is in response to Amendment filed on 2/27/06.

Claims 1, 9, and 23 are currently amended.

Claims 14-22 and 28-30 are cancelled.

Claims 1-13 and 23-27 are pending in the current Office Action.

Response to Arguments

Applicant's arguments filed 2/27/06 have been fully considered but they are not persuasive.

 Applicant argues that the applied art, Tosey, is quite different from the claimed invention and further explains how the invention is different from the teachings of Tosey.

The examiner respectfully disagrees. The reference, which the examiner has applied to reject the claims, reads on the claimed limitations. The claims are written broadly enough for Tosey to read on them. Although the claims are interpreted in

light of the specification, limitations from the specification are not read into the claims.

Applicant argues that the information of the packet is not interpreted as to a policy
and that the arrival of any internet protocol (IP) packet, even one of low priority, will
wake the application processor of Tosey.

The examiner respectfully disagrees. Tosey teaches that only IP packets such as keep-alive, connection clear, or incoming message notifications will wake the application processor. Tosey sets a policy as to which IP messages will wake the processor. In addition, the claims do not say anything about the priority of the messages.

Applicant argues that Tosey does not teach the awakening of a processor by a
 WWAN module that filters incoming signals for information that conforms to a filter
 policy.

The examiner respectfully disagrees. Filtering, at a WWAN signal handling logic, information included in the WWAN signal (Par.20;1-4, Par.24, and Par.25, the WWAN sends a wakeup request for keep-alive, connection clear, or emergency/important/urgent email notifications, i.e. filtering is performed);

determining from a filter policy if the information warrants the waking of the processor (Par.20;1-4, Par.24, and Par.25, if the packets comprise keep-alive, connection clear, or emergency/important/urgent email notifications, i.e. filter policy or rule, then wake up the processor. Filter policy is a rule saying only certain messages can wake the processor).

Art Unit: 2617

Applicant argues that Zmudzinski does not teach nor suggest a module to store
these messages at the computing device and to wake the processor of the device
when required.

The examiner notes that that limitation was rejected under 35 U.S.C. 103(a) as being unpatentable over Tosey in view of Zmudzinski and not soley on Zmudzinski under 35 U.S.C. 102(e). The applicant is addressing the teachings of the Zmudzinski reference as if the examiner has applied the art to a 35 U.S.C. 102(e) rejection and not as part of a 35 U.S.C. 103(a) rejection.

(Tosey, par 18, teaches of queue, it would have been obvious to one of ordinary skill in the art to understand that while Zmudzinski teaches that the traffic is held at a network device, this network device could be the WWAN module of Tosey because the WWAN model of Tosey has a memory and is part of a network). The examiner believes the combination of Tosey with Zmudzinski does teach that the messages may be stored in the computing device and to wake the processor of the device when required.

 Applicant argues that Zmudzinski teaches holding or delaying of messages at the proxy not at the WWAN module.

The examiner notes that that limitation was rejected under 35 U.S.C. 103(a) as being unpatentable over Tosey in view of Zmudzinski and not soley on Zmudzinski under 35 U.S.C. 102(e). The applicant is addressing the teachings of the Zmudzinski reference as if the examiner has applied the art to a 35 U.S.C. 102(e) rejection and not as part of a 35 U.S.C. 103(a) rejection.

(Tosey, par.18, teaches of queue, it would have been obvious to one of ordinary skill in the art to understand that while Zmudzinski teaches that the traffic is held at a network device, this network device could be the WWAN module of Tosey because the WWAN model of Tosey has a memory and is part of a network). The examiner believes the combination of Tosey with Zmudzinski does teach that the messages may be stored in the computing device and to wake the processor of the device when required.

 Applicant argues that Zmudzinski appears to teach a proxy device that does not directly wake the device, but caches information so that the next time the device wakes the information can be made available to the device.

The examiner notes that that limitation was rejected under 35 U.S.C. 103(a) as being unpatentable over Tosey in view of Zmudzinski and not soley on Zmudzinski under 35 U.S.C. 102(e). The applicant is addressing the teachings of the Zmudzinski reference as if the examiner has applied the art to a 35 U.S.C. 102(e) rejection and not as part of a 35 U.S.C. 103(a) rejection.

(Tosey, par.18, teaches of queue, it would have been obvious to one of ordinary skill in the art to understand that while Zmudzinski teaches that the traffic is held at a network device, this network device could be the WWAN module of Tosey because the WWAN model of Tosey has a memory and is part of a network and Tosey, par.24, teaches the network device, i.e. WWAN module wakes the processor). The examiner believes the combination of Tosey with Zmudzinski does teach that the network device directly wakes the processor.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 1. Claims 1, 9, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Tosey (U.S. Pub 2004/0068666 A1).

Regarding Claims 1, 9, and 23, Tosey teaches receiving a wireless wide area network (WWAN) signal (Par.20;1-4, Par.24, and Par.25, the WWAN receives IP packets, i.e. WWAN signals);

filtering, at a WWAN signal handling logic, information included in the WWAN signal (Par.20;1-4, Par.24, and Par.25, the WWAN filters the incoming signals and sends a wakeup request only for keep-alive, connection clear, or emergency/important/urgent email notifications are received);

determining if an action is to be performed by a processor (<u>Par.20;1-4</u>, <u>Par.24</u>, and <u>Par.25</u>, depending on the incoming message, it is determined whether <u>or not an alarm is sent to the processor</u>); and

when the action is to be performed by the processor, and the processor is in a low power mode (<u>Par.24</u>, the processor is sleeping), determining from a filter policy if the information warrants the waking of the processor (<u>Par.20;1-4</u>, <u>Par.24</u>, and

Application/Control Number: 10/686,446 Page 7

Art Unit: 2617

Par.25, if the packets comprise keep-alive, connection clear, or emergency/important/urgent email notifications, i.e. filter policy or rule, then wake up the processor).

Regarding Claim 6, Tosey teaches all the limitations as recited in claim 1, and Tosey further teaches the WWAN signal is received by a normally-on WWAN module (Par.16;15-19 and Par.22;13-15, the WWAN module is not in sleep mode and Par.24; the WWAN receives the signals and then determines if it needs to wakeup the processor).

Regarding Claims 7, 24, and 26, Tosey teaches all the limitations as recited in claims 1 and 23, and Tosey further teaches the WWAN module includes a dedicated battery or receives power from a power source used by the processor to enable it to be normally on and continuously receiving signals. The dedicated battery is inherent based on the electrical decoupling of the WWAN module from the processor so that the processor may go to sleep.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 8 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tosey (U.S. Pub 2004/0068666 A1).

Regarding Claims 8 and 25, Tosey teaches all the limitations as recited in claims 1 and 23, however Tosey does not expressly teach the WWAN module receives power from a power source used by the processor.

On the other hand, one of ordinary skill in the art, at the time of the invention was made would understand that the WWAN module may also use a power source used by the processor as paragraph 17 indicates there is a power management subsystem.

To one of ordinary skill in the art, it would have been obvious to modify Tosey such that the WWAN module receives power from a power source used by the processor, to power the entire Internet Appliance, i.e. WWAN module and the Application processor by the power management subsystem, so that there are not multiple power sources cluttering up the system.

 Claims 2-5, 10-13, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tosey (U.S. Pub 2004/0068666 A1) in view of Zmudzinski et al (U.S. Pub 2004/0128310 A1).

Regarding Claims 2, 4, 10, 12, and 27, Tosey teaches all the limitations as recited in claims 1, 9, and 23, however Tosey is silent on determining if the action can be delayed; and if the action cannot be delayed, awakening the processor.

Tosey does teach of a queue (<u>Par.18</u>), which indicates that the WWAN module has the ability to hold information, i.e. traffic.

Zmudzinski teaches that it is known that traffic (i.e. SMS or IM) can be held for a sleeping device until a determined time period (Par.17).

Application/Control Number: 10/686,446 Page 9

Art Unit: 2617

To one of ordinary skill in the art, it would have been obvious to modify Tosey with Zmudzinski, such that determining if the action can be delayed; and if the action cannot be delayed, awakening the processor, to provide a method where the traffic can be held until a later time in order to save battery life and to allow the sleeping device to wake up first (Par.16 and Par.17).

Regarding Claims 3 and 11, Tosey and Zmudzinski teach all the limitations as recited in claims 2 and 10, and Tosey further teaches awakening the processor includes transitioning the processor from the low power mode to a normal power mode (Par.24, the processor is awakened, i.e. normal power mode).

Regarding Claims 5 and 13, Tosey and Zmudzinski teach all the limitations as recited in claims 4 and 12, and including the WWAN signal includes SMS messages (Zmudzinski, par.22 and 17, and Tosey, par.3) and that the WWAN includes queuing the SMS messages (Tosey, par.18, teaches of queue, it would have been obvious to one of ordinary skill in the art to understand that while Zmudzinski teaches that the traffic is held at a network device, this network device could be the WWAN module of Tosey because the WWAN model of Tosey has a memory and is part of a network) and wherein the SMS messages are first stored in a SMC and then forwarded to the WWAN module, this would have been obvious to one or ordinary skill in the art at the time the invention was made because as taught by Zmudzinski, the traffic may be held at a network device (Par.17).

Conclusion

Application/Control Number: 10/686,446

Art Unit: 2617

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley L. Kim whose telephone number is 571-272-7867. The examiner can normally be reached on Monday-Friday 9:00am-5:30pm.

Page 10

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

WLK

SUPERVISORY PATENT EXAMINER